

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF WISCONSIN**

FAIL-SAFE, L.L.C.,

Plaintiff,

v.

Case No. 08-CV-310

A.O. SMITH CORPORATION,

Defendant.

ORDER

On November 24, 2010, this court issued a trial scheduling order in this matter, with the goal of resolving a case that has been pending on this court's docket for nearly three years. (Docket #204). The court set a trial date of January 24, 2011, and invited the parties to submit early motions *in limine*. Heeding the court's invitation, on December 6, 2010, the defendant, A.O. Smith Corporation ("AOS"), filed a motion *in limine* ("first motion *in limine*" OR "*Daubert* motion") to exclude certain expert testimony and to exclude testimony regarding future damages, a renewal of an earlier motion before the court. (Docket #205). The following day AOS filed another motion *in limine* ("second motion *in limine*") to exclude certain portions of the same testimony Fail-Safe, L.L.C. ("FS") wishes to present for reasons separate from the first motion *in limine*.¹ (Docket #216). The court addresses the

¹ The court notes that on December 21, 2010, FS filed a motion for supplemental discovery. (Docket #233). Although the balance of the court's order does not address the motion in a formal sense for all intents and purposes, the subject matter has been effectively mooted.

first motion *in limine* in this order with the hope of clarifying issues for the parties before the trial occurs.²

In deciding the motion *in limine*, the court broadly notes that federal courts have the power to exclude evidence *in limine* pursuant to the inherent authority of a court to manage trials. *Luce v. United States*, 469 U.S. 38, 41 n.4, 105 S. Ct. 460 (1984). The court notes that motions *in limine* are frequently directed “toward limiting the subjects about which testimony may be offered, or about which particular witnesses may testify.” 3-16 Moore's Federal Practice - Civil § 16.77. The court will exercise its discretion, noting the important function of the motion *in limine*, namely that it permits the court to eliminate from further consideration evidence that clearly should not be presented to the jury. *See Jonasson v. Lutheran Child and Family Serv.*, 115 F.3d 436, 440 (7th Cir. 1997). However, if the evidence cannot be evaluated accurately or sufficiently by the court in such a procedural context, it may be necessary to defer rulings until trial. *Id.* Having said that, such a determination depends on the specific context of the motion and does not exist as a matter of right for a given party. *Id.*

² In a footnote, FS voices concerns regarding the timeline that the court set in responding to the motion *in limine*, as FS had three days to respond to the motion. (Pl.'s Resp. at n.1). The court would be far more sympathetic to FS's concerns if: (1) this matter had not been pending on the court's docket for as long as it has; and (2) the issues in the motions before the court were not identical to the issues presented in the earlier *Daubert* motions. The court is satisfied that the parties' briefings have apprised the court of the issues surrounding the first motion *in limine*.

I. PLAINTIFF’S ENTITLEMENT TO A JURY TRIAL

Before addressing the substance of the first motion *in limine*, the court will determine the matter of whether FS is entitled to a jury trial, an issue on which the court requested additional submissions from the parties. (Docket #230). The parties’ filed simultaneous briefs on December 17, 2010 (Docket #231, #232), with opposite conclusions: the plaintiff maintains that it is “entitled to a jury trial under the Seventh Amendment,” (Pl.’s 12/17/10 Br. at 11), whereas the defendant argues that FS is “not entitled to a jury trial” on its remaining claim. (Def.’s 12/17/10 Br. at 1). Given that the matter of entitlement to a jury trial is now disputed, the matter is best resolved at the outset.

The court begins by noting broadly the Supreme Court’s familiar quote that the “maintenance of the jury as a fact-finding body is of such importance and occupies so firm a place in our history and jurisprudence that any seeming curtailment of the right to a jury trial should be scrutinized with the utmost care.” *Beacon Theatres, Inc. v. Westover*, 539 U.S. 500, 501, 79 S. Ct. 948 (1959). The right to a jury trial in a civil matter stems from the Seventh Amendment of the United States Constitution, which preserves the right to a jury trial in “suits at common law.” “To determine whether a particular action will resolve legal rights,” as opposed to an equitable claim, a court must examine: (1) the nature of the issues involved, comparing the action to “18th century actions brought in the courts of England prior to the merger of the courts of law and equity”; and (2) “the remedy sought,” determining whether

“it is legal or equitable in nature.” *Chauffeurs, Teamsters & Helpers, Local No. 391 v. Terry*, 494 U.S. 558, 565, 110 S. Ct. 1339 (1990).

With respect to the first issue, there is no simple answer to the exact nature of the modern unjust enrichment claim. Compare *Fotta v. Trustees of the UMW Health & Ret. Fund of 1974*, 165 F.3d 209, 213-14 (3d Cir. 1998) (“Restitution – the traditional remedy for unjust enrichment – is widely, if not universally, regarded as a tool for equity”) and 8-38 Moore’s Federal Practice – Civil § 38.31 (“Restitution is [an] equitable remedy affording no right to [a] jury trial”) with *Great-West Life & Annuity Ins. Co. v. Knudson*, 534 U.S. 204, 212 (2002) (“[N]ot all relief falling under the rubric of restitution is available in equity.”). As the Seventh Circuit noted in *Medtronic, Inc. v. Intermedics, Inc.*, 725 F.2d 440 (7th Cir. 1984), “the origins of unjust enrichment are both legal and equitable.” *Id.* at 443. Ultimately, the court finds that FS’s claim sounds in quasi-contract: FS claims it provided a benefit to AOS under circumstances that AOS’s retaining of the benefit would be unjust. Such a claim is premised on the legal fiction that the person receiving the benefit had promised to pay for it. See Restatement of Restitution § 5(a) (1937). “Claims for quasi-contract arose and developed under the common law writ of *assumpsit* and, as a result, were historically brought in the courts of law.” *Fischer Imaging Corp v. Gen. Elec. Co.*, 187 F.3d 1165, 1172 (10th Cir. 1999). As such, the court holds that, irrespective of how unjust enrichment claims are commonly referred to as in Wisconsin case law, in this case, the nature of the issues involved are legal in nature.

Moreover, the court finds that the remedy sought is legal in nature, as well. FS is seeking disgorgement of the benefit FS allegedly provided to AOS. While typically damages are equitable in actions for disgorgement of improper profits, *Terry*, 494 U.S. at 570, the court is guided by dicta in the case of *First Nat'l Bank v. Warren*, 796 F.2d 999 (7th Cir. 1986), where the Seventh Circuit described the disgorgement remedy as legal in nature when a “plaintiff seeks money for its own coffers.” *Id.* at 1000. Such is the situation in this matter, and the court finds that, given the dicta in *First Nat'l Bank*, the Seventh Circuit would likely conclude that the remedy sought in this matter is legal in nature. As a consequence, the court holds that FS is entitled to a jury trial on its unjust enrichment claim.

II. THE *DAUBERT* MOTION

With the jury trial issue resolved, the court moves to an extended discussion of the defendant’s pending motion *in limine* to: (1) precluding FS “from presenting any testimony, opinions or argument that references or relies on future sales of the Guardian”; and (2) excluding Dr. Warren Keegan (“Keegan”) and Mr. Shawn Fox (“Fox”) from testifying with regard to damages for future profits.³ (Docket #207). The defendant’s brief in support of its motion reveals that the motion raises what the court views as three distinct issues that the court must address. First, AOS argues that the proposed testimony of both Dr. Keegan and Mr. Fox regarding the damages for the unjust enrichment claim are unreliable. Second, the defendant contends that

³ The court has the benefit of not only the briefs by the plaintiff and the defendant on the present motion, but, because the motion *in limine* is a product of an earlier motion to exclude (Docket #111), the court also possesses the briefs that were provided in the earlier motion.

any testimony regarding references to AOS's potential future sales respecting the Guardian, an AOS product, do not assist the trier of fact. Third, AOS argues that even if the testimony would somehow assist the jury, the prejudicial effects of hearing the evidence far outweighs the probative value of the evidence. However, before examining the legal efficacy of the defendant's motion, the court first looks to the expert reports and relevant deposition testimony that form the basis of precisely what FS's two experts are prepared to testify regarding. See Fed. R. Civ. P. 26(a)(2)(B)(i) (requiring that the expert report contain "a *complete* statement of all opinions the witness will express and the basis and reasons for them") (emphasis added).

A. The Proposed Testimony

FS has proffered two experts to discuss the issue of damages for the unjust enrichment claim: (1) Dr. Keegan; and (2) Mr. Fox.

1. Dr. Keegan's Testimony

The court reviews Dr. Keegan's testimony, looking at his two expert reports and his deposition testimony.

a. Dr. Keegan's November 3, 2009 Report

According to his initial expert report dated November 3, 2009 (Docket #214-3),⁴ Dr. Keegan, who possesses a Masters in Economics from Kansas State University and an M.B.A. and a doctorate from the Harvard Business School,

⁴ For simplicity, the court's citations to the various expert reports will merely reference the docket number and the exhibit number that follows.

teaches at Pace University in New York City. *Id.* at 1. The witness has taught for over forty years at various business schools and has founded a consulting firm, in which context he has served as an expert “on a variety of issues in federal and state courts.” *Id.* at 2. Dr. Keegan’s initial report begins by examining the pool and spa industry and the role of AOS within that industry. *Id.* at 3-4. Specifically, the witness discusses the growing public interest in equipping pools with safety devices, including Safety Vacuum Release System (“SVRS”) equipped motors, that prevent pool suction entrapment. *Id.* at 3-4. Dr. Keegan also notes AOS’s prominent role in the pool industry, citing to internal AOS documents to support the claim that the defendant “holds approximately 95 percent and 51 percent . . . market share” in the swimming pool and the hot tub pump market. *Id.* at 4.

Dr. Keegan’s November 3, 2009 report then shifts to discuss the Guardian, the SVRS-equipped motor, that AOS is allegedly attempting to market. The witness discusses in detail the “market potential” for the Guardian, concluding that there is “enormous market potential” for the product. *Id.* at 5. Propelling Dr. Keegan’s conclusion are several “demand drivers.” *Id.* First, the witness notes that the Virginia Graeme Baker Pool & Spa Act (“Baker Act”), a law that requires “all public pools” with a “single main drain be fitted with equipment that would mitigate a suction entrapment event,” went into effect on December 19, 2008, increasing the market potential of an SVRS device such as the AOS Guardian. *Id.* Second, Dr. Keegan finds that litigation resulting from suction entrapment events have further increased interest in products that prevent pool suction entrapment. *Id.* at 6-7. The witness,

citing to AOS's marketing materials for the Guardian products, concludes that the defendant's marketing will "capitaliz[e] on perceived latent consumer demand for an SVRS-equipped pump motor." *Id.* at 7. Dr. Keegan also discusses the fact that the Guardian "utilizes an electronic solution to initiate motor shutdown," as opposed to a mechanical solution that could potentially risk damage to the motor, providing another reason the product will be appealing. *Id.* at 9. In addition, the witness cites AOS's "domination" in the in-ground pool market as a reason for why the defendant is "well positioned to enter and penetrate" the market "quickly with the Guardian product." *Id.* at 10. Likewise, Dr. Keegan cites AOS's robust market share in the hot tub pool pump market as another reason that the Guardian will be successful. *Id.* at 12. Additionally, the witness compares the Guardian with various other SVRS systems produced by AOS's competitors, concluding that "the Guardian is a versatile, inexpensive SVRS solution," providing AOS with "significant competitive advantages over competing SVRS solutions." *Id.* at 14. Moreover, Dr. Keegan predicts that AOS will be successful with the Guardian, as the product "is further secured by the significant barriers to entry faced by [potential] competitors seeking to enter the SVRS-equipped motor market," such as research barriers and the need for any pump motor to comply with both legal requirements and individual buyers' demands. *Id.* at 15. Finally, the witness notes the "strong dedication" of AOS to the Guardian, including making the technology "available" for every replacement motor and to every original equipment manufacturer ("OEM"), as another factor for why the

product will be a success.⁵ *Id.* at 16-17. Notably, however, Dr. Keegan does not discuss any factors that might suppress demand for the Guardian.

Dr. Keegan – in his November 2009 expert report – also discusses AOS’s “capabilities” in being able to distribute the Guardian. *Id.* at 18. The witness dismisses AOS’s minimal sales of the Guardian to date, concluding that AOS is employing a “strategy” of “small-scale introduction of the Guardian” allowing the defendant’s engineers to “identify and address design issues.” *Id.* Dr. Keegan notes what he calls AOS’s “impressive manufacturing capabilities,” concluding that the defendant is capable of meeting any future demand for the Guardian. *Id.* at 18-19. The proposed expert also takes note of the “considerable marketing capabilities” of AOS, which, coupled with the “dedication to which the marketing staff has pursued a viable marketing strategy for the Guardian product,” indicates that the Guardian is positioned to attract the attention of various consumers. *Id.* at 19. Keegan also cites AOS’s position within the pool and hot tub pump market as a reason for why the Guardian will be a successful product, going as far as to compare AOS’s market position with that of Intel Corporation in the computing industry. *Id.* at 20.

Dr. Keegan ultimately concludes in his November 3, 2009 report that the Guardian will potentially generate for AOS “tens of millions of dollars in . . . annual sales.” *Id.* at 11. Citing only to AOS’s projections, Keegan anticipates “350,000

⁵ Dr. Keegan hypothesizes that the Guardian will be subject to “total integration” – that is, the Guardian will be the only type of pool pump motor AOS manufactures. (Docket #214-3 at 17). He makes this conclusion based on: (1) the risk of liability if AOS does not integrate the SVRS device into its pumps; and (2) to reduce costs related to servicing both Guardian and non-Guardian equipped motors. *Id.* at 17-18.

units annual sales in the in-ground residential pool market within 18 months of launch and 1.25 million annual units thereafter.” *Id.* at 10. Dr. Keegan supports this conclusion by citing from other AOS documents the number of installed in-ground pools in the United States (seven million) and the limited life span of the pumps and motors in those pools (five to seven years). *Id.* at 11. The witness also notes an external report that cites the number of new pools constructed nearly six years prior to the release of the expert report (170,000).⁶ *Id.* at 11. From this material, and based on his earlier observations about the market demand for the Guardian, Dr. Keegan crafts a “market estimation model,” that estimates over a ten-year period the potential future sales of Guardian-equipped motors. *Id.* at 20-21. The numbers that form Dr. Keegan’s ultimate estimate are a product of AOS’s market share and “the total market units in each year” and AOS’s “market penetration estimate – [the] ability to enter the market with the Guardian product.” *Id.*

In the end, Dr. Keegan provides the following numbers, crystalizing what FS wants to prove via his testimony. He assumes that AOS will maintain its 95% market share in the pool pump market over the next ten years. (Docket #214-3 Ex. 5 at 1). Keegan estimates in his November 2009 report that the Guardian will achieve 12.1% “market penetration” in in-ground pools by 2010 and would jump to 100% by 2012. *Id.* Accepting AOS’s estimate that the company would sell 350,000 units within the product’s first eighteen months on the market, using a 2.35% growth rate, Dr.

⁶ The witness also discusses the potential for a greater market in the hot tub segment of the industry and in the international market, but ultimately states that there is “not sufficient” information for him to make a precise projection. (Docket #214-3 at 12).

Keegan estimated that from 2010 to 2019, AOS would sell 9,122,144 units of the Guardian. *Id.* at 2. Using Mr. Fox's estimated price of between \$185.23 and \$208.56 per unit with an inflation rate of 2.5%, Dr. Keegan expects AOS to receive \$2,059,085,06 in revenue over the ten year period for the Guardian sales in the in-ground pool pump market, resulting in \$591,231,729 in profit. *Id.* at 3.

b. Dr. Keegan's June 18, 2010 Report

On June 18, 2010, Dr. Keegan submitted another expert report. (Docket #204-4). The court initially notes that the June 18, 2010 report is more than double the size of his previous report.⁷ Like his previous report, Dr. Keegan broadly concluded that there is a "robust market potential for the [AOS] Guardian product and that [AOS] is uniquely poised and intends to capitalize on that market potential." *Id.* at 1. In the June 2010 report, Dr. Keegan argues that the Guardian technology can be "valued based on its forecasted earnings potential," using techniques used to value initial public offerings in equity markets. *Id.* While several parts of the June 2010 report mirror what is in the November 2009 report, the court notes the major differences between Dr. Keegan's two submissions.⁸

⁷ Although this order does not address the permissibility of the additions to Dr. Keegan's and Mr. Fox's respective expert reports, the duty to supplement a report under Rule 26(e) in no way can be the means to avoid a *Daubert* challenge, as such a tactic violates Rule 26(a)(2)(B)(i)'s requirement that the expert report be a "complete statement of all opinions the witness will express and allows an expert's testimony to become a moving target. *Baratto v. Brushstrokes Fine Art, Inc.*, 701 F. Supp. 2d 1068, 1071 (W.D. Wis. 2010); see also *KCH Servs. v. Vanaire, Inc.*, No. 05-777-C, 2010 U.S. Dist. LEXIS 32182, at *9-10 (W.D. Ky. Mar. 31, 2010).

⁸ The court focuses on major changes to the report. The court does note, however, semantic changes, such as describing the eMod motor and the Guardian motor as synonymous, in keeping with FS's strategy during the summary judgment stage. (Docket #214-4 at 5).

First, the court notes that Dr. Keegan added to his explanation of the Guardian's functionality. *Id.* at 5. The witness notes that the Guardian technology marks a shift for AOS from focusing on "mechanically-controlled motors" to "electronically-controlled motors." *Id.* Keegan posits that this "shift" "took a considerable amount of time to develop, and . . . is still being perfected today." *Id.* at 6. Dr. Keegan, citing to internal AOS documents, broadly notes that the Guardian has been the forebearer for other electronically-controlled motors or "smart motors." *Id.*

Second, Dr. Keegan added an entire section to his expert report entitled "Stages of Market Development," *id.* at 6, in which the witness explains the life cycle of commercial products and how the length of the time period for development will depend on "the complexity of the product, the firm's commitment to the product, the firm's expertise in the product's market segment and technology required to construct a reliable product, the competitive landscape, and other factors." *Id.* at 7. Dr. Keegan further explains in his report how "full adoption of a product . . . does not happen immediately, . . . but rather is a process that occurs over time." *Id.* at 8. As with his previous expert report, Dr. Keegan finds that AOS has "not yet commercialized the Guardian product." *Id.* at 9. Moreover, the witness notes that AOS has had several problems that have delayed the release of the Guardian, such as "nuisance tripping." *Id.* at 10. However, Dr. Keegan hypothesizes, based on AOS's internal documents that discuss the stages of development of its various motors, that "the development of the Guardian technology has progressed through

these stages and is now entering into launch phase” or commercialization, with the commercialization of the Guardian product “not occur[ring] before 2011.” *Id.* at 11.

Third, Dr. Keegan, in his latest report, proffers additional findings regarding the “demand drivers” for the Guardian product. Specifically, Keegan notes that in February of 2010, the Consumer Product Safety Commission (“CPSC”) issued guidelines to help states create laws that establish pool safety standards for residential swimming pools, noting that adoption of such laws may occur because federal grants to states are conditioned on the adoption of the guidelines.⁹ *Id.* at 13. Moreover, the witness notes that the CPSC is now promoting a nationwide pool and spa safety education campaign that Dr. Keegan thinks will drive demand for the Guardian. *Id.* In addition, Dr. Keegan cites to internal AOS documents that acknowledge there is a concern by AOS regarding increased litigation resulting from entrapment incidents. *Id.* at 14. Moreover, Dr. Keegan argues that “newly provided [AOS] documentation demonstrates that a shift toward energy efficient . . . technologies may be contributing to the favorable market environment for the Guardian product,” which is a more energy efficient motor than typical single-speed motors. *Id.* at 17. Also, the witness adds to his thoughts regarding AOS’s potential for international expansion, arguing that the defendant has “no choice” but to expand its markets internationally. *Id.* at 23-25. Additionally, Dr. Keegan adds to his discussion regarding AOS’s commitment to the Guardian product and AOS’s efforts

⁹ Dr. Keegan also points to similar CPSC guidelines for hot tubs to conclude there will be increased demand for the Guardian for use in hot tubs. (Docket #214-4 at 22).

to integrate the Guardian into its product line in his latest report, citing internal AOS documents and discussions for support. *Id.* at 29-32. Finally, Dr. Keegan supplements his earlier thoughts regarding AOS's marketing strategy and plan for the Guardian, including that the defendant has "developed a comprehensive Guardian marketing program that is ready for implementation upon" commercialization. *Id.* at 34. The witness further describes the marketing strategy in detail, *id.* at 35-37, and notes AOS's work at a recent trade show to support his contention that AOS is dedicated to marketing the Guardian. *Id.* at 38-42.

Fourth, the witness changes his math from his earlier report. For example, Dr. Keegan, instead of using a base price of \$202.94 per Guardian unit (Docket #214-3 at n.40), uses \$279 as the base price for a Guardian unit.¹⁰ (Docket #214-4 at n.87). Additionally, Dr. Keegan appears to revise his statements regarding AOS's share of the in-ground pool pump motor market, stating that 2010 market estimates indicate that AOS's share of the Southwest and West markets of the United States is approximately seventy percent, whereas its market share in the rest of the United States is at eighty-five percent. *Id.* at 20. Keegan also cites to other documents that show AOS had an eighty-nine percent share of the market in 2009. *Id.* In fact, in Dr. Keegan's market estimation model, the witness opts to use eighty-nine percent as the share of the market AOS will have from 2011 until 2020. (Docket #214-4 Ex. 5 at 1-2). Apparently, merely shifting his earlier estimates by a year, Dr. Keegan, assuming that commercialization of the Guardian will begin in 2011, estimates that

¹⁰ These numbers are, of course, a product of Mr. Fox's estimates.

the Guardian will penetrate 12.2% of the in-ground pool market in 2011, followed by 23.6% of the in-ground pool market in 2012, followed by 100% of the market in 2013 until 2020. *Id.* The witness increases his estimate of the market growth rate from his earlier estimate, from 2.35% (Docket #214-3 Ex. 5 at 1), to 3.00% (Docket #214-4 Ex. 5 at 1). In the end, Dr. Keegan concludes that, from 2011 until 2020, AOS will sell 9,405,245 Guardian units, receive \$2,266,027,981 in revenue, and achieve profits of \$529,247,243 from the Guardian's sales. *Id.* at 2.

Finally, and perhaps most boldly, Dr. Keegan revamps his discussion of his market estimation model for the Guardian. (Docket #214-4 at 42-46). Instead of developing a model that "estimates gross revenues associated with Guardian-equipped motors" (Docket #214-3 at 20), the witness, in his June 2010 report, employs a market estimation model "based on the income approach of valuing intangible assets . . . through a discounted cash flow analysis," finding a "present value of the expected economic income to be earned from the ownership of the asset." (Docket #214-4 at 43). Moreover, Dr. Keegan explains for the first time in his latest report why he chose to use a "ten-year window" in this case, citing that he came up with the ten-year window in conjunction with the other expert, Mr. Fox, relying on a series of factors.¹¹ *Id.* The core of Dr. Keegan's estimates are similar to his earlier report: he states he "developed estimates" for gross revenues with Guardian-equipped motors over the next ten years and "appl[ied]" AOS's market

¹¹ Dr. Keegan's report does not discuss how these factors influenced his decision to use a ten-year window as an estimate.

share and market penetration estimate to that estimate. *Id.* at 44. However, then, Dr. Keegan attempts to value the potential of the Guardian in a manner similar to valuing an initial public offering. *Id.* The witness argues that valuing the potential Guardian profits is similar to valuing estimated profits of a company attempting an initial public offering, citing examples of how companies are valued through the initial public offering process.¹² *Id.* at 44-46.

c. Dr. Keegan's Deposition Testimony

On December 9, 2009, after Dr. Keegan submitted his first expert report, but before he submitted his second supplemental report, the witness's deposition was taken. (Docket #214-5). The court recounts a few passages of the deposition testimony that helped illustrate the bases and highlight shortcomings in Dr. Keegan's opinion. The witness testified in considerable part with regard to the data that underlies his proffered testimony. Specifically, Keegan testified in his deposition that the numbers that form the witness's market estimates are purely from AOS. (Keegan Dep. at 38-39). Dr. Keegan admits that he is unsure of when the AOS documents that project sales numbers were printed.¹³ *Id.* at 56-57. Additionally, the testimony of Dr. Keegan discussed one of the central demand drivers: the Baker Act. Dr. Keegan admits that he did not analyze the actual effect the Baker Act has

¹² Dr. Keegan cites the examples of Ironwood Pharmaceuticals and LensVector, two companies that have attracted investors despite the fact that neither company's products have been fully commercialized. (Docket #214-4 at 45-46).

¹³ The sales documents refer to sales of the eMod, which, as the very least, is the name of an early prototype SVRS pool pump motor that AOS attempted to develop.

had on sales of SVRS devices. *Id.* at 75. Moreover, the witness's testimony touched on the issue of the integration of the Guardian: the court notes that Dr. Keegan averred that, while he reviewed internal emails from AOS executives rejecting earlier projections regarding the extent of Guardian integration, Dr. Keegan disregarded such emails. *Id.* at 171-72. Finally, the testimony reached the issue of the products that compete with the Guardian. The witness concedes that he does not have "any idea whether . . . [the] Guardian product has sold more than any of the competitive SVRS systems identified in" the expert report. *Id.* at 39-40. Moreover, the witness struggled to cite any non-SVRS solutions to pool suction entrapment that he considered when analyzing the demand for the Guardian, broadly noting that his conclusion was that the Guardian was the "most cost effective way to achieve full compliance for existing installations." *Id.* at 88-89. Having reviewed the relevant material related to Dr. Keegan's proposed testimony, the court turns to an examination of Mr. Fox's proposed testimony.

2. Mr. Fox's Testimony

Similar to the court's review of Dr. Keegan's testimony, the court examines Mr. Fox's testimony by reviewing his two expert reports and his deposition testimony.

a. Mr. Fox's November 3, 2009 Report

According to his initial expert report, dated November 3, 2009, Mr. Fox is the Managing Director of RSM McGladrey, Inc.'s Financial Forensics and Valuation Services practice. (Docket #214-1 at 1). Mr. Fox begins his report discussing the information he used to form his opinion, contending that AOS had not yet produced all the information he needed in order to provide a full and accurate opinion. *Id.* at 2-3. The witness continues, noting that his testimony is being used to calculate "unjust enrichment damages." *Id.* at 3. Mr. Fox states at the onset his assumptions when stating his opinion, including that the overall contribution made to AOS for its SVRS pool pump motor by FS is between five and fifty-five percent. *Id.* at 3-4. Based on this assumption, Mr. Fox estimates that the present value of unjust enrichment damages are somewhere between 13 million and 144 million dollars. *Id.* at 4. The witness states that he bases his present value calculations on Dr. Keegan's estimates for how many units will be sold between 2010 and 2019.¹⁴ *Id.* at 4; 10. The balance of Mr. Fox's report is devoted to explaining his damages calculations.

¹⁴ Mr. Fox summarily asserts that he has "considered the general reasonableness of the projections [provided by Dr. Keegan] . . . [and] believe[s] the projections prepared by [Dr. Keegan] to be reasonable." (Docket #214-1 at 10).

After providing factual background, *id.* at 5-9, Mr. Fox discusses, in relevant part, his analysis of the unjust enrichment damages in this case.¹⁵ *Id.* at 9. The witness frames the damages assessment as the “value from the perspective of the enriched party.” *Id.* Mr. Fox then relays the basic framework for how he determined the unjust enrichment values, starting with “calculating the incremental profit that [AOS] would receive by adding the eMod functionality onto its SVRS pool pump motors.” *Id.* at 10. To do this, Mr. Fox had to first calculate a unit price for the Guardian motor, which he determined to be \$208.56 for motors sold to dealers who sell the pumps directly to consumers and \$185.23 for motors sold to OEMs. *Id.* at 11. The prices for a Guardian model that was sold to wholesalers was a product of the 2009 price of the model, adjusted upward each year by 2.5% to account for

¹⁵ The witness states that the calculation of the reasonable royalty damages is used in connection with the trade secret misappropriation claim. FS’s attempt in a footnote in its response brief to raise the argument that a reasonable royalty rate is the basis of its unjust enrichment damages is classic sandbagging at the extreme that has unfortunately become the *modus operandi* in this litigation. (Pl.’s Resp. Br. at 3 n.4). FS’s expert stated from the beginning that its calculation of the unjust enrichment damages was reserved to its calculations in the beginning of its report; to attempt to apply Mr. Fox’s theories on a reasonable royalty rate to the unjust enrichment damages would be effectively a new theory on how to value the benefit AOS received by Mr. Fox that was wholly absent from his reports. FS cites to the unpublished case of *Veritas Operating Corp. v. Microsoft Corp.*, No. 06-0703, 2008 WL 7404617, at *3 (W.D. Wash. Feb. 26, 2008), for the proposition that a reasonable royalty is an appropriate damage measure for unjust enrichment. In that case, the reasonable royalty measure was a product of a trade secret misappropriation claim, not a common law unjust enrichment claim. *Id.* More importantly, the *Veritas* court did not state that a reasonable royalty calculation is appropriate for unjust enrichment damages. *Id.* Rather, the court found that relevant evidence in the case made clear that for a contract claim the plaintiff had a reasonable expectation to receive a royalty rate. *Id.* For reasons stated in this court’s summary judgment order, there was no contract in this case and there was no evidence that the plaintiff had any reason to expect it was in a joint venture relationship warranting a reasonable royalty rate. The passing reference to the phrase “unjust enrichment” in the *Veritas* case does not persuade the court indeed there was no serious analysis of whether the reasonable royalty rate is properly includable in an unjust enrichment award in *Veritas*. However, the *Veritas* case does provide a good example of what admissible expert testimony in federal court should sound like on an issue such as damages: “[the witness’s] report is 123 pages long and contains a *thorough and reasoned* analysis” of the claims at issue. *Id.* (emphasis added).

inflation. *Id.* The “OEM price” was estimated by reducing the price of the motor that was sold to wholesalers by 7% and by accounting for a 16% decrease to the “eMod Functionality pricing,” numbers based from internal AOS documents. *Id.* Using these prices and using Dr. Keegan’s numbers regarding number of units sold, Mr. Fox multiplied the two sets of data in order to project the revenue he expected AOS to receive from selling the Guardian pool pump for the years 2010 to 2019.¹⁶ *Id.* at 12. Mr. Fox then, using AOS’s data for the projected profitability of the eMod, calculated the projected profit that would result from the future sales of the Guardian. *Id.* at 12.

Following that step, Mr. Fox states that he calculated the present value of the estimated profits. *Id.* at 10; 13. The witness states that he used a 15% discount rate to determine the present value of AOS’s projected future cash flows, which Mr. Fox asserts considered the “blended cost of debt, equity, and other capital, and an increment reflect [sic] the specific risk associated with the launch and acceptance of the eMod Functionality.”¹⁷ *Id.* at 13. Finally, the witness “apportioned [the] incremental profits by a percentage representing the contribution that” FS made to the development of the product. *Id.* at 10. Assuming a range of 5% to 55%

¹⁶ Mr. Fox states in his first report that he used the ten year term because the 2003 confidentiality agreement between AOS and FS had a fifteen year term, which allowed him to assume AOS would sell the motor through December 31, 2019. (Docket #214-4 at 13-14).

¹⁷Exhibit E of Mr. Fox’s report provides his calculation of the Discount Rate, based on AOS’s equity, its debt, and the cost of equity. (Docket #214-1 Ex. E). Mr. Fox does not explain in his November 2009 report how he arrived at his calculation of AOS’s “weighted average cost of capital,” the primary figure driving the discount rate, nor does he explain the risk factor he added.

contribution by FS, Mr. Fox stated in his November 2009 report that the present value of the unjust enrichment damages are between 13.1 million and 144.2 million dollars.¹⁸ *Id.* at 14.

b. Mr. Fox's July 16, 2010 Report

On July 16, 2010, Mr. Fox submitted another expert report. (Docket #214-2). As earlier discussed in reference to Dr. Keegan's second report, the court notes any major, relevant changes between Mr. Fox's first and second reports.¹⁹ First, Mr. Fox begins his submission by explaining the reason for the new report. The witness cites that "nearly 60,000 pages of [AOS] documents [had] been produced, and numerous depositions [had] been taken" in the time that had passed since his last submission, requiring him to update his expert report.²⁰ *Id.* at 1. Mr. Fox states that the additional documents allowed him to "incorporate . . . additional cost information" into his estimate regarding the variable profit margin for the Guardian pool pump. *Id.*

¹⁸ The court notes that the remainder of Mr. Fox's November 2009 report is devoted to calculating the damages related to the trade secret misappropriation claim, which is irrelevant with the dismissal of the trade secret claim for reasons discussed elsewhere in this order.

¹⁹ The court will not discuss Mr. Fox's rather obvious tendency to opine on matters outside of his knowledge base. For example, Mr. Fox discusses in his latest report the factual basis for FS's unjust enrichment claim. While Mr. Fox never claims to be an expert on pool pump motors, in one part of his newest report, he asks, "If [AOS] could have independently developed the technology, the question remains, why did they not do so without [FS's] involvement." *Id.* at 17. Such comments will never pass muster under Fed. R. Evid. 702, and the court notes that Mr. Fox's comments suggest the considerable influence the plaintiff's counsel undoubtedly had on the expert in preparing the second report on damages.

²⁰ The court notes that the scheduling order in this matter, a product of the parties' mutual agreement, closed *all* discovery on December 14, 2009, a month after expert reports were due. (Docket #20). While Mr. Fox had an obligation to supplement his report with the new information provided, Mr. Fox's and FS's rather hypocritical complaints about AOS's "sandbagging" with regard to discovery are less than compelling, given the schedule that FS agreed to in this matter. The schedule could have obviously been tailored such that the only discovery allowed after the disclosure of expert reports was deposing of the experts.

Later in his report, the witness details the new information that changed his report. *Id.* at 13. For example, Mr. Fox cites that the new documents he received show the profits and losses for the pump division from years 2006 to 2009. *Id.* As a result, Mr. Fox notes that he “decreased [his] assessment of the unjust enrichment damages.” *Id.* at 3. The witness’s opinion regarding the range of damages now is between 9.4 million and 102.9 million dollars, nearly a third less than his original assessment. *Id.* at 4; 32. The change from the earlier report is due to a higher discount rate, a lower average sales price, a lower inflation rate, and lower incremental profits generated by the Guardian. (Docket #214-2 Ex. D-E).

Second, the witness adds a lengthy discussion regarding the problems with the commercialization of the Guardian. (Docket #214-2 at 12-13). Fox writes that in his prior report he “assumed [AOS] had commercialized the eMod/Guardian technology when [AOS] started selling . . . pool pump motor units in 2006,” but “based on additional [AOS] documents,” the witness concludes that the “technology is still not commercially available.” *Id.* at 12. In fact, Mr. Fox states that AOS “is still working on the development of the . . . technology and has not yet implemented a comprehensive marketing strategy.” *Id.* Fox further recounts deposition testimony from AOS executives stating frustrations with the development of the Guardian product. *Id.* at 12-13.

However, while Mr. Fox recites evidence of the problems with the Guardian’s development, the witness wholeheartedly agrees with Dr. Keegan’s assessments regarding the market potential of the Guardian. In fact, in the latest report, Mr. Fox

scrutinizes Dr. Keegan's latest conclusions regarding the expected unit sales volumes for the Guardian in much more detail than he treated similar conclusions in the first report. *Id.* at 17-19. The witness notes historical sales rates for pool pump motors and concludes that such figures "appear to be reasonably close to Dr. Keegan's expected unit sales." *Id.* at 18. Despite not claiming to be an expert in business operations and management,²¹ *id.* at 1, Mr. Fox opts to opine in his latest report on why he thinks Dr. Keegan's estimates may even be "conservative," citing demand factors, such as the Guardian's potential in international markets and the hot tub market. *Id.* at 18-19. Moreover, the witness offers his opinion that AOS will integrate the Guardian in all of its future pool pump motors. *Id.* at 19. Additionally, Mr. Fox dismisses any problems that AOS has had in developing the Guardian, because an AOS executive concluded that "demand was strong" and because of a report that noted that "fall customer meetings indicate that there remains strong interest in [AOS's] SVRS line." *Id.* at 20.

The next major change in Mr. Fox's report stems from the witness adding considerably to his explanation of how he calculated the present value of the benefit AOS allegedly received from FS. *Id.* at 14-20. Mr. Fox explains the "foundations" of valuation theory, the concept that the value of a business or a product is "derived from the expected economic benefits of ownership." *Id.* at 14. The witness further describes that there are three approaches for determining the value of an asset

²¹ Mr. Fox claims to be an expert at financial forensics and valuation services, but nowhere in his submissions to the court does he assert himself to be familiar with business management studies.

including looking at the: (1) “income-producing capability of an asset,” *id.* at 14-15; (2) “what similar assets sell for in the market in an arms-length transaction,” including looking at a company’s “enterprise value” and its “earnings before interest, taxes, depreciation and amortization,”²² *id.* at 15; and (3) the “expected benefits of ownership by quantifying the amount of money that would be required to replace the future service capability of the asset.” *Id.* at 16. Mr. Fox states that he employed the “income method” of valuing the Guardian in his first and second reports. *Id.* at 15. Later in his report, the witness explains for the first time how he determined the inflation rate to use in his calculations. *Id.* at 23. In attempting to determine an accurate cost for the Guardian, Mr. Fox relies on several internal AOS documents that indicate that the company’s assessment of the variable profit margin on each Guardian unit and the company’s historic profits and losses for AOS’s pool pump motors. *Id.* at 25-26. Based on AOS’s internal assessments, the witness theorizes the profits per unit sold for the Guardian will be twice as profitable as AOS’s current motors.²³ *Id.* at 26. Additionally, the witness adds considerably to his discussion of the discount rate used, stating that the use of an 18% discount rate is appropriate because the Guardian motor is piggybacking on an existing pool pump motor that

²² Mr. Fox goes into a significant discussion regarding a Standards & Poor’s analysis of AOS’s stock price and pricing multiples, such as AOS’s ratio of its stock price to its income or earnings. (Docket #214-2 at 15). Ultimately, Mr. Fox uses a “high multiple” of 6.0 and applies it to the expected incremental profits for the Guardian technology, allowing for a sum of \$200 million dollars. Needless to say, none of Mr. Fox’s analysis is in his earlier report.

²³ Mr. Fox explains he came to such a conclusion by looking at several new factors provided by the additional materials AOS provided, such as AOS’s “sales commissions, material and burden variances, product returns, freight, inventory, adjustments, and product failure.” (Docket #214-2 at 27).

has “established consistent and wide-spread sales over time.” *Id.* at 28. Mr. Fox also augments the section of his report explaining why he chose to adopt Dr. Keegan’s ten-year term for the product, explaining that he chose the term because of the length of the 2003 confidentiality agreement and because of the length of potential patents resulting from the confidentiality agreement.²⁴ *Id.* at 29.

Finally, Mr. Fox adds to the data he used to reach and clarify his opinion.²⁵ For example, the witness discusses AOS’s stock price over a seven year period. *Id.* at 8. Moreover, the witness states that he calculated the per unit selling price of each motor based on the sales of Guardian products that were sold as part of AOS’s product testing program. *Id.* at 22.

c. Mr. Fox’s Deposition Testimony

The court finally takes note of several of the witness’s comments during his December 8, 2009 deposition testimony. (Docket #214-9). Notably, Mr. Fox testified that he has not determined an error rate for his projections regarding AOS’s future sales, nor is he aware of any sort of error rate for the estimate of the future sales. (Fox Dep. at 105). The witness states that the estimate of the future sales “could be higher or they could be lower,” but believes that the estimate is “reasonable.” *Id.* at 106-07. Moreover, Mr. Fox testified that his assumption of 5% to 50% contribution

²⁴ Moreover, Mr. Fox decides to opine on the agreements made between AOS and Stingl, Sta-Rite, and Pentair in making an assessment of the proper length of the product life cycle. (Docket #214-2 at 30-31). It remains unclear as to why this assessment only found its way into Mr. Fox’s second report.

²⁵ This new data is only, in part, a product of the new documents that the witness received from AOS.

by FS to the Guardian is based on another assumption that FS's contributions to the earliest AOS SVRS products are identical to the latest generations of AOS SVRS devices. *Id.* at 132. Additionally, Mr. Fox stated in his deposition that the basis for his assumption that AOS will integrate SVRS technology in all of its technology is internal documents from AOS indicating that the "market potential for [the] product is significant and . . . they could convert a lot of their sales of regular pool pumps motors into SVRS pool pump motors." *Id.* at 175. The witness concedes that he has not seen any documents than indicate total integration is a "likely eventuality." *Id.* at 176. Finally, when pressed on the issue of why the ten-year term of the life cycle of the product was used in measuring damages, Mr. Fox began discussing factors that were not included in his original report, such as the life of a patent, ultimately concluding that a life span of nine or eleven years were reasonable estimates of the life span of the product, as well. *Id.* at 199-202.

Having discussed the opinions and theories of the plaintiff's two proffered experts, the court proceeds to examine the substance of the defendant's first motion *in limine*.

B. Admissibility of the Plaintiff's Expert Testimony

1. Is a hearing necessary to resolve the admissibility issues?

FS asks that this court: (1) "carry [the] issues [regarding the first motion *in limine*] and resolve them after hearing evidence at trial"; or, in the alternative, (2) "hold an evidentiary hearing at the Court's earliest convenience." (Pl.'s Resp. Br. at 2). The court declines FS's invitation. The trial court has complete discretion in

determining whether it will conduct a hearing to determine whether proffered evidence is reliable. *Daubert v. Merrell Dow Pharm.*, 509 U.S. 579, 594-95, 125 L. Ed. 2d 469, 113 S. Ct. 2786 (1993). Here, the plaintiff has not suggested anything that a separate hearing would do to help resolve the first motion *in limine*.²⁶ Moreover, the plaintiff's experts have had two attempts to clarify their opinions.²⁷ The court finds that a separate hearing, whether before or during trial, with regards to the admissibility of the expert testimony will likely be a regurgitation of what the court already has before it, only to expend more time and money in this already extremely over-litigated matter. See *Hershey v. Pac. Inv. Mgmt. Co. LLC*, 697 F. Supp. 945, 948 (N.D. Ill. 2010) ("The Court declines to hold such a hearing as it has before it more than enough information to determine reliability . . . [s]pecifically, the parties have provided the Court with, inter alia, the depositions of the three experts at issue as well as their expert reports.") As such, the court will not conduct a separate hearing on this matter or delay its resolution until trial. Accordingly, the court proceeds to discuss the legal framework for assessing the defendant's first motion *in limine*.

²⁶ As the court has repeatedly stated, the deadlines the court set with regard to expert reports are true deadlines. A hearing cannot be a means by which the experts add to the explanation for their opinions.

²⁷ The court is not endorsing the plaintiff's expert's "second round" of clarifications, which likely consist of additional theorizing attempting to avoid exclusion under Rule 702.

2. The *Daubert* Framework

Federal Rule of Evidence 702 and *Daubert* govern the admission of expert testimony. Rule 702 states:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Thus, a district court is obliged to function as a “gatekeeper” regarding expert testimony, which requires insuring that the proposed testimony is both relevant and reliable. *Daubert*, 509 U.S. at 589. In order to make such an evaluation, the court must analyze the proposed testimony using a three-step analysis. *Ervin v. Johnson & Johnson, Inc.*, 492 F.3d 901, 904 (7th Cir. 2007).

First, “the witness must be qualified ‘as an expert by knowledge, skill, experience, training, or education.’” *Id.* An expert need not have particular academic credentials to be “qualified,” but rather “anyone with relevant expertise enabling him [or her] to offer responsible opinion testimony helpful to judge or jury may qualify as an expert witness.” *Tuf Racing Prods., Inc. v. American Suzuki Motor Corp.*, 223 F.3d 585, 591 (7th Cir. 2000).

However, even if the court finds that a witness is a “supremely qualified expert,” that witness “cannot waltz into the courtroom and render opinions unless those opinions are based upon some recognized scientific method and are reliable

...” *Clark v. Takata Corp.*, 192 F.3d 750, 759 n.5 (7th Cir. 1999). Accordingly, at the second step of its analysis of expert testimony, the court must determine that an “expert’s reasoning or methodologies underlying the testimony” are “reliable.” *Ervin*, 492 F.3d at 904. *Daubert* provided a non-exhaustive list of “guideposts” for the court to consult in assessing the reliability of expert testimony: (1) whether the theory can be or has been tested; (2) whether the theory has been subjected to peer review and publication; (3) the theory’s known or potential error rate when applied; and (4) whether the theory has been generally accepted in the relevant scientific, technical, or professional community.²⁸ *Daubert*, 509 U.S. at 593-94. “[T]he *Daubert* framework when assessing the reliability of an expert’s testimony is a flexible one that must be adapted to the particular circumstances of the case and the type of testimony being proffered.” See *Mihailovich v. Laatsch*, 359 F.3d 892, 919 (7th Cir. 2004); see also *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999) (holding that, in applying the *Daubert* framework, a court must “account for the various types

²⁸ Other factors may apply. The Seventh Circuit, parroting the Advisory Committee Notes to Rule 702, has suggested other

benchmarks for gauging expert reliability, including: (5) whether “maintenance standards and controls” exist; (6) whether the testimony relates to “matters growing naturally and directly out of research they have conducted independent of the litigation,” or developed “expressly for purposes of testifying”; (7) “whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion”; (8) “whether the expert has adequately accounted for obvious alternative explanations”; (9) “whether the expert is being as careful as he would be in his regular professional work outside his paid litigation consulting”; and (10) “whether the field of expertise claimed by the expert is known to reach reliable results for the type of opinion the expert would give.”

Fuesting v. Zimmer, Inc. (Fuesting I), 421 F.3d 528, 534-35 (7th Cir. 2005), *vacated in part on other grounds*, 448 F.3d 936 (7th Cir. 2006).

of potentially appropriate expert testimony.”). Ultimately, the object of the court’s Rule 702 reliability inquiry is to ensure that the opinions expressed by testifying experts “adhere to the same standards of intellectual rigor that are demanded in their professional work.” *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 318 (7th Cir. 1996). However, the court is not concerned at the reliability stage with “issues of credibility and persuasiveness,” as “it is not the trial court’s role to decide whether an expert’s opinion is correct.” *Deputy v. Lehman Bros., Inc.*, 345 F.3d 494, 505 (7th Cir. 2003) (quoting *Smith v. Ford Motor Co.*, 215 F.3d 713, 719 (7th Cir. 2000). Rather, the court is “limited to determining whether . . . the methodology underlying that testimony is sound.” *Id.*

Third, a court must confirm that an expert’s testimony is relevant; that is, the testimony must “assist the trier of fact to understand the evidence or to determine a fact in issue.” *Ervin*, 492 F.3d at 904. Relevant evidence is evidence that has “any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence.” *Daubert*, 509 U.S. at 587 (citing Fed. R. Evid. 401). “Where an expert’s hypothetical explanation” of an issue in the litigation would “aid the jury in its deliberations, that testimony satisfies *Daubert*’s relevancy requirement.” *Smith*, 215 F.3d at 718-19. The proponent of the expert’s testimony bears the burden of proof with respect to whether the admissibility requirements are met. See *Lewis v. CITGO Petroleum Corp.*, 561 F.3d 698, 704 (7th Cir. 2009). With these legal principles in mind, the court proceeds to examine the proposed testimony of the two

witnesses that are the subject of the *Daubert* motions. As the defendant has not challenged the qualifications of the witnesses, the court first proceeds to examine the reliability of the methods that Dr. Keegan and Mr. Fox used in reaching their conclusions.²⁹

3. The Reliability of Dr. Keegan's Opinion

There is a fine line between a court finding that proffered expert testimony is “unpersuasive” (and capable of being submitted to a jury) and when a court concludes that evidence is wholly “unreliable” (and properly excludable under *Daubert*). See *Tucker v. SmithKline Beecham Corp.*, 701 F. Supp. 2d 1040, 1055 (S.D. Ind. 2010) (“The line between methodology and conclusion can be subtle and even elusive in some cases.”). In this case, upon examination of each of the expert reports submitted by Dr. Keegan and his deposition testimony, the court concludes Dr. Keegan’s proposed testimony not only falls on the unreliable side of the “line,” but is all but domiciled there. Several reasons propel the court’s conclusion.

First, the court finds that the data that Dr. Keegan used to project how many Guardian units would be launched upon commercialization and how quickly those Guardian units would be adopted is extremely suspect, as was the witness’s scrutiny of that data. Notably, Dr. Keegan, even in his latest report, adopts wholesale from a single, undated AOS PowerPoint slide, which stated that the company *hoped* to have “350k . . . Target Units” as the starting point for how many Guardian units that

²⁹ However, the comments that Mr. Fox makes in his reports regarding the pool pump motor industry and the specific facts of this case that the court highlighted earlier in this order are, of course, excludable, as Mr. Fox is not qualified to make such assessments. *Ervin*, 492 F.3d at 904.

would be on the market in the first year and a half. (Docket #214-8; Docket #214-4 Ex. 5). The witness's scrutiny of this starting point number is incredibly shallow: using AOS's own data for how many pool pump motors there are in the country and the average life span of those motors, Dr. Keegan surmises that the Guardian product is "suitable" for the pump replacement market. (Docket #214-4 at 21). Dr. Keegan's reliance on AOS's data renders his opinion unreliable. The reliability of AOS's early hopes for the Guardian's market potential and the underlying data AOS used should have been "independently verified" before the witness opined on the "plaintiff's future sales." *Lyman v. St. Jude Med. S.C., Inc.*, 580 F. Supp. 2d 719 (E.D. Wis. 2008). It appears the only "independent" research Dr. Keegan performed was with regard to the "current" demand for pool pump motors. (Docket #214-4 at 22). However, Dr. Keegan's research is a bit outdated to say the least, in that he used the number of pools constructed in 2004 as the means to gauge future demand for pool pump motors.³⁰ *Id.* Use of outdated or suspect data as the base of an expert's testimony are proper grounds to exclude that testimony. *Marcel v. Placid Oil Co.*, 11 F.3d 563, 567-568 (5th Cir. 1994) (upholding the exclusion of expert testimony based on "outdated, statistically suspect, and untrustworthy evidence."). Ultimately, the witness does not seriously scrutinize whether the specific 350,000 unit starting point that AOS hoped for once upon a time is at all realistic given current market conditions and AOS's current goals.

³⁰ This is *not* to say the court is saying that the witness's ultimate opinion is incorrect. However, the use of such outmoded data is broadly indicative of how weak the methods Dr. Keegan used to analyze the underlying issue.

More importantly, the witness in no way scrutinizes AOS's assumptions about how quickly the product will grow on the market: while the witness provides broad reasons for why the Guardian will be a successful product, Dr. Keegan does not explain why he chose the numbers he did for how quickly the Guardian will grow, other than citing to the exact same document from which the witness derives the 350,000 unit number. Here, there is no indication that the underlying data that Dr. Keegan relies upon is anything more than a hopeful projection, a far cry from being "reliable sources of information" that an expert can rely on in forming an opinion. *Weir v. Crown Equip. Corp.*, 217 F.3d 453, 465 (7th Cir. 2000) (citing to Federal Rule of Evidence 703); *see also United States v. Parra*, 402 F.3d 752, 758 (7th Cir. 2005) (holding that an expert's testimony must be "based upon sufficient . . . data") (quoting Fed. R. Evid. 702); *Deimer v. Cincinnati Sub-Zero Prods. Inc.*, 58 F.3d 341, 345 (7th Cir. 1995) (holding that an expert's opinion must have a "reliable basis in knowledge and experience of his discipline"). From the court's perspective, it appears that the witness lists several reasons why the Guardian will be successful, looks at the numbers projected by AOS, and declares, without any true analysis, that AOS's early projections are correct. All of Dr. Keegan's analysis is in a black box out of the view of the court, *see* Docket #214-2 ("In considering all the factors discussed above, I have estimated the market for an [AOS] SVRS-equipped technology"), and the court cannot simply take an expert's word for a specific proposition. *General Electric Co. v. Joiner*, 522 U.S. 136, 146, 118 S. Ct. 512 (1997) ("nothing in either *Daubert* or the Federal Rules of Evidence requires a district court to admit opinion

evidence that is connected to existing data only by the *ipse dixit* of the expert”); see also *Metavante Corp. v. Emigrant Sav. Bank*, 619 F.3d 748, 761 (7th Cir. 2010) (“Rule 702 does require, however, that the expert explain the ‘methodologies and principles’ that support his opinion; he cannot simply assert a ‘bottom line’”) (internal citations omitted). In fact, Dr. Keegan appears to be merely parroting the predictions of AOS executives regarding: (1) the launch date of the Guardian; (2) how many Guardian units will be sold in the first year and a half; and (3) how quickly the Guardian will saturate the marketplace. Concluding that an event will occur because “someone else has concluded that [event] will occur is utterly circular in its logic and is the epitome of an unreliable methodology.”³¹ *Lemmermann v. Blue Cross Blue Shield*, 713 F. Supp. 2d 791 (E.D. Wis. 2010).

³¹ The plaintiff argues in its first brief in this case that “expert reliance on an opposing party’s internal documents to construct a damages model is widely accepted.” (Pl.’s 02/04/10 Br. at 18). FS misses the point: the issue is not whether relying on internal documents is appropriate – the issue is whether reliance on the documents is accompanied by a reasoned methodology. FS cites to *McIntosh v. Monsanto Co.*, 462 F. Supp. 2d 1025, 1033 (E.D. Mo. 2006), but in that case there was no question as to the reliability of the data underlying Monsanto’s projected data. Moreover, the *McIntosh* court’s one line of analysis regarding the use of an internal document in expert testimony can hardly be deemed “persuasive authority.” *Id.* (“Monsanto may challenge the applicability (perhaps even the accuracy) of its document to this case, and Tollison’s assumptions with respect to his “but for” pricing model are fodder for cross-examination.”) FS also cites to *Amigo Broadcasting L.P. v. Spanish Broadcasting System, Inc.*, 2006 WL 5503872, at *4 (April 21, 2006 W.D. Tex. 2006) (“Questions relating to the bases and sources of the expert opinion affect the weight to be assigned that opinion rather than its admissibility”), which in turn cites to *Primrose Operating Co. v. Nat’l American Ins. Co.*, 382 F.3d 546 (5th Cir. 2004), for the proposition that “reliance on an opponent’s documents to create a damages model is a question of weight, and not admissibility.” (Pl.’s 02/04/10 Br. at 21). However, the court is guided by the Seventh Circuit’s clear teaching that an expert’s opinion must have “analytically sound bases so that they are more than mere ‘speculation’ by the expert.” *Smith*, 215 F.3d at 719; see also *United States v. Gardner*, 211 F.3d 1049, 1054 (7th Cir. 2000) (“Before the district court may allow expert testimony into evidence, the submitting party must show that the testimony has a reliable basis.”). Here, the basis of Dr. Keegan’s opinion is untested and unsound.

Beyond the insufficiency of the data supporting Dr. Keegan's testimony, and the insufficiency of the witness's analysis of that data, the court also finds the witness's methodology unreliable because of how Dr. Keegan uniformly treated all evidence that undermined his underlying conclusion: unwarranted dismissal of the evidence or outright blindness to contrary evidence. *Cf. Minasian v. Standard Chtd. Bank, P.L.C.*, 109 F.3d 1212, 1216 (7th Cir. 1997) (finding that an expert's submission to the court exemplified "everything that is bad about expert witnesses in litigation" because it was "full of vigorous assertion . . . carefully tailored to support plaintiffs' position but devoid of analysis."). In fact, it is readily apparent that Dr. Keegan all but "cherry picked" the data he wanted to use, providing the court with another strong reason to conclude that the witness utilized an unreliable methodology. *Barber v. United Airlines, Inc.*, 17 Fed. Appx. 433, 437 (7th Cir. 2001) (holding that a "selective use of facts fails to satisfy the scientific method and *Daubert*"). Dr. Keegan's two reports are rich with examples of his "cherry picking" of the evidence. For example, Dr. Keegan, relying on internal AOS predictions, estimated in his first report that the Guardian would be launched in 2010. (Docket #214-3 Ex. 5 at 1). By the time his second report was released, his earlier predictions had been completely proven wrong. Nonetheless, while Dr. Keegan acknowledged the problems AOS had with developing the Guardian, the witness declares summarily that his "full review of the evidence in this case suggests that commercialization of the Guardian product will not occur before 2011." (Docket #214-4 at 11). Dr. Keegan does not even attempt to grapple with whether AOS will

be able to overcome the issues its had with the Guardian, such as “nuisance tripping,” within six short months, and the witness readily admits he did not analyze admissions from the AOS executives about problems with the Guardian. (Keegan Dep. at 171-72). In fact, the only support Dr. Keegan has for his 2011 assessments are the predictions of AOS executives regarding the launch date, estimates that already have been once proven wrong.

Similarly lacking is Dr. Keegan’s analysis of the products that are competing with the Guardian. The witness, without citation to any source,³² analyzes the prices and the disadvantages of various SVRS devices sold by companies like Stingl and Sta-Rite. (Docket #214-4 at 27). The witness does not analyze what the future may hold for these products, such as downward pressure on the prices of a given product or solutions to a given product’s current disadvantages, that would necessarily make the product more competitive with the Guardian. Instead, Dr. Keegan ignores those possibilities and assumes that the competitive positions of the various products will remain static over time. In fact, Dr. Keegan admits that he never researched the *actual* sales of the competing SVRS devices (Keegan Dep. at 39-40), lending to this court’s conclusion that the expert’s methodology is unreliable. See, e.g., *Daubert*,

³² The court is confident that such sloppiness would not suffice in Dr. Keegan’s professional work. See JAMES R. HITCHNER, FINANCIAL VALUATION: APPLICATIONS AND METHODS 27 (2d ed. 2006) (“A significant part of the valuation process involves indentifying and incorporating both internal and external material into the valuation report”); see generally *id.* at 9 (“The valuation of . . . business assets is well founded in academic publications and empirical studies . . . [t]he application of recognized valuation methodologies combined with *rigorous* analysis of the private entity provides the foundation of business valuation) (emphasis added); *Rosen v. Ciba-Geigy Corp.*, 78 F.3d 316, 318 (7th Cir. 1996) (holding that experts must “adhere to the same standards of intellectual rigor that are demanded in their professional work.”)

509 U.S. at 593 (“Ordinarily, a key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has been) tested”); see also *Chapman v. Maytag Corp.*, 297 F.3d 682, 688 (7th Cir. 2002) (“[T]he absence of any testing indicates that Petry's proffered opinions cannot fairly be characterized as scientific knowledge.”)³³ Moreover, for reasons not apparent to the court, the witness opts to not even discuss other non-SVRS devices that would compete with the Guardian. The Baker Act, which Dr. Keegan claims to have reviewed in his report (Docket #214-4 Ex. 4), provides a list of alternative products that attempt to prevent pool suction entrapment, such as “Suction-limiting vent systems,” “Gravity drainage systems,” and “Automatic pump shut-off systems.” 15 U.S.C § 8003. Dr. Keegan’s answer in his deposition testimony makes clear that he did not consider non-SVRS devices with any level of seriousness.³⁴ (Keegan Dep. at 88-89). In short, the witness wholly ignores the fact that the marketplace offers a host of products that compete with the Guardian and instead focuses only on the evidence that supports his conclusion.

Another simple example of Dr. Keegan’s “cherry-picking” of the evidence is his analysis of AOS’s market share. In his latest estimate to the court, the witness

³³ Dr. Keegan apparently readily makes broad hypotheses without testing his conclusions. For example, Dr. Keegan argued that the Baker Act would increase demand for SVRS devices, but never actually tested whether the Act going into effect actually influenced the demand for SVRS devices. (Keegan Dep. at 75).

³⁴ The plaintiff suggests that defendant counsel’s techniques in Keegan’s deposition were “ambush” style. The plaintiff’s argument is an ad-hom attack: Dr. Keegan was pressed on a key issue in the market for anti-entrapment devices and could not answer the question with anything other than broad, warrantless claims.

states that the market share for AOS in the in-ground swimming pool industry will remain constant at 89% for the next ten years.³⁵ (Docket #214-4 Ex. 5 at 1). Dr. Keegan provides this estimate, despite acknowledging a 2010 estimate that AOS has eighty-five percent market share in the Northern parts of the United States and only seventy percent market share in the Western and Southern United States (Docket #214-4 at 20), the region where most swimming pools are to be found. See, e.g., *Local pool businesses take a dip as demand falls*, WACO TRIB.-HER., July 25, 2010, (citing the Association of Pool & Spa Professionals). Moreover, the examples the court has cited are merely the tip of the proverbial iceberg – without any explanation provided by Dr. Keegan on why he chose the data he did, the court can only surmise that the witness’s methodology is utterly unreliable and must be excluded. See *People Who Care v. Rockford Bd. of Educ.*, 111 F.3d 528, 537 (7th Cir. 1997) (stating that “[a] statistical study is not inadmissible merely because it is unable to exclude all possible causal factors other than the one of interest,” but “a statistical study that fails to correct for salient explanatory variables, or even to make the most elementary comparisons, has no value as causal explanation and is therefore inadmissible in a federal court”); see generally *Schiller & Schmidt v. Nordisco Corp.*, 969 F.2d 410, 415 (7th Cir. 1992) (holding that “people who want

³⁵ Keegan’s earlier estimate was 95%. (Docket #214-3 Ex. 5 at 1). Perhaps in the greatest example of Dr. Keegan’s selective use of evidence, the witness opted to ignore one projection by AOS that the company held 90% of the market share for residential in-ground pool. That projection was listed on the Power Point slide that contained all of AOS’s projections regarding AOS’s hopes for the future sales of the Guardian, including the 350,000 units figure. The only conclusion the court can make is that Dr. Keegan wholesale adopted the figures on the Power Point slide that fit a sizeable damages theory for FS.

damages have to prove them, using methodologies that . . . must not insult the intelligence.”).

Finally, the court also notes another central reason for its conclusions regarding the reliability of Dr. Keegan’s methodology: throughout his submissions to the court, the witness makes several incredible assumptions that belie basic logic and as a consequence lead to the inescapable conclusion that Dr. Keegan is completely speculating regarding his ultimate conclusions. See *Target Market Publishing, Inc. v. ADVO, Inc.*, 136 F.3d 1139, 1144-45 (7th Cir. 1998) (affirming exclusion of expert opinion on expected revenues using unrealistic assumptions). For example, the witness assumes that AOS’s market share will remain constant throughout the next ten years (Docket #214-4 Ex. 5), without providing any explanation for such an assumption other than general platitudes about the strength of AOS as a company. Moreover, Dr. Keegan assumes that demand for pool products will remain the same for the next decade, failing to analyze rather obvious issues such as the effect of the recent economic decline on the pool industry.³⁶ See, e.g., *CVC Invests in Leonard Green's Pool Business*, MERGERS AND ACQUISITIONS REPORTS, Vol. 23 No. 35, Aug. 30, 2010, at 25 (“The recession, coupled with the lack of consumer discretionary spending, hasn't exactly made life easy for the

³⁶ In another example of blatant cherry picking, the witness includes a whole host of issues that he thinks will boost demand for the Guardian, including the CPSC’s recent education campaign on suction entrapment, but Keegan did not even mention a word about the current economic climate in which the Guardian would be sold. (Docket #214-4 at 13). Having said that, the issue for the court is *not* that evidence of the recession makes the expert’s opinion unpersuasive. The issue is that the expert did not even discuss a basic problem with an assumption he made.

swimming pool industry.”) Additionally, as discussed above, the witness states, without any specific discussion, that sales for the Guardian will grow steadily over the next ten years (Docket #214-4 Ex. 5), assuming that no other product, either current or future, will be able to even chip away at the Guardian’s market position. Dr. Keegan’s assumption that the Guardian will have a constant growth rate contradicts even the witness’s own writings. See, e.g., MALCOLM H.B. MCDONALD & WARREN J. KEEGAN, *MARKETING PLANS THAT WORK* 108 (2d ed. 2002) (“But no market is infinitely expandable, and eventually the rate of growth slows as the product moves into its maturity stage . . . [t]he point eventually is reached at which there are too many firms in the market, price wars break out, some firms drop out of the market, and finally the market itself falls into decline.”). Even if current market conditions remain static, the witness appears to assume that consumers will pay for the Guardian with SVRS technology, as opposed to using a non-SVRS suction entrapment measure coupled with a non-SVRS pool pump motor.³⁷ Moreover, as the defendant points out in its brief, Dr. Keegan makes another rather bold assumption that 100% of AOS’s OEM sales will include the Guardian, even when the OEM purchasers, such as Sta-Rite and Pentair, manufacture their *own* SVRS devices and have little reason to discard their own products in favor of the Guardian.³⁸ (Def.’s Br. at 23). Additionally, any analysis of how effective AOS’s

³⁷ This could very well be, but the witness fails to analyze with any seriousness the alternatives to purchasing a SVRS device.

³⁸ There may be reasons for the OEM purchasers to buy the Guardian despite producing a similar product. However, Dr. Keegan never addresses this issue in his submissions to the court.

marketing techniques for the Guardian will be is absent from either of his reports: Dr. Keegan notes AOS's "considerable marketing capabilities," concluding, without analyzing whether the specific strategies AOS is going to employ to market its goods actually works outside of the context of a trade show.³⁹ (Docket #214-4 at 34-37). Finally, the court notes perhaps the most egregious assumption in Dr. Keegan's proffered testimony: that the product lifespan will be ten years. As confirmed by the two witnesses' respective testimony, there appears to be no rhyme or reason for the ten year product lifespan.⁴⁰ The court could continue pointing out basic, unwarranted assumptions in Dr. Keegan's study, but the discussion here suffices to show that the witness is speculating with regard to his ultimate conclusions. Such speculation does not an expert opinion make. *Deimer*, 58 F.3d at 344 (holding that a court must "rule out" expert opinions based on "subjective belief or unsupported

³⁹ Dr. Keegan failed to analyze, for example, whether using a comic book character to sell pool pump motors is an effective strategy for the portion of the public that buys pool pumps. Of course, this could be a brilliant strategy, but Dr. Keegan's analysis is conclusory and consists only of internal AOS documents that surmise the strategy will be successful.

⁴⁰ In what is typical of Dr. Keegan's submissions to the court, the witness lists a laundry list of reasons that allowed him to conclude ten years was the appropriate product lifespan, including the life of the "trade secret information, market dynamics, industry custom, and the length of possible patent protection." (Docket #214-4 at 43). Dr. Keegan fails to analyze any of these factors and explain why ten years is appropriate as opposed to any other number. Not only does the witness base the life of the "trade secret information" and "possible patent protection" on AOS's projections (as opposed to his own research and analysis), it is entirely unclear on why those projections dictate the *actual* lifespan of the product in question. Moreover, as the defendant notes in its submission to the court, a change of a year or two in the product lifespan will result in changes of millions of dollars in the damages sum, underlining the fact that Dr. Keegan is engaged in naked speculation. (Def.'s Br. at 24 n.8).

speculation.”). Dr. Keegan’s methodology underlying his opinion is unreliable, and the court proceeds to analyze Mr. Fox’s testimony.⁴¹

4. The Reliability of Mr. Fox’s Testimony

Similarly, the court finds that the methodology that Mr. Fox used in forming his ultimate opinion to be unreliable. First and foremost, the data underlying Mr. Fox’s entire opinion are Dr. Keegan’s projections for future Guardian sales, projections that were speculative and a product of an unsound methodology. Indeed, before a “district court may allow expert testimony into evidence, the submitting party must show that the testimony has a reliable basis.” *United States v. Gardner*, 211 F.3d 1049, 1054 (7th Cir. 2000). Here, Mr. Fox adopted Dr. Keegan’s projections wholesale, finding in summary fashion that the “expected sales of Guardian SVRS pump motors prepared by Keegan & Company LLC to be reasonable.” (Docket #214-2 at 21). However, beyond the dubious origin of the data underlying his opinion, Mr. Fox’s analysis contains several more flaws similar to those the court found fatal with respect to Dr. Keegan’s testimony. For example, the witness made the same seemingly arbitrary assumption that a ten year life span would be appropriate for the life of the Guardian, and Mr. Fox also assumed that AOS would maintain the exact same market share and demand level for the life span of the product. Moreover, Mr. Fox is equally guilty of “cherry picking” the evidence he used in forming his opinion: while the witness acknowledges the glut of problems AOS

⁴¹ The court notes that this court is not the first court in this circuit to exclude Dr. Keegan’s testimony on reliability grounds. See *Biomet Orthopedics, Inc. v. Tact Med. Instruments, Inc.*, No. 01-CV-895, 2004 U.S. Dist. LEXIS 30740 (N.D. Ind. Nov. 2, 2004).

has had in trying to develop the Guardian (Docket #214-2 at 12-13), Mr. Fox dismisses such issues summarily by referring to optimistic reports of AOS executives that state that there “remains strong interest in [the] SVRS line,” failing to address in a meaningful way the problems, such as nuisance tripping, that may very well prevent the Guardian from being marketed.⁴² *Id.* at 20.

Beyond the issues discussed above, the court highlights one other major problem with the methodology used to form Mr. Fox’s opinion.⁴³ To calculate the present value of the projected profits, Mr. Fox used a discount rate of 18% in his latest report. (Docket #214-2 Ex. H). The Seventh Circuit has noted the extreme importance in using an accurate discount rate when calculating damages, as an “award of damages is a sum certain” that replaces a “stream of earnings that is highly uncertain,” requiring that “risk aversion . . . to be taken into account in computing the discount (interest) rate.” *Douglass v. Hustler Magazine*, 769 F.2d 1128 (7th Cir. 1985). Exhibit H of Mr. Fox’s report attempts to explain what the basis of the discount rate he used to form his ultimate opinion was. However, Mr. Fox does not explain where he derived several of the numbers he used to calculate the discount rate, going so far as to boldly add 5.50% to the discount rate based on a

⁴² The court is unclear on why “strong demand” for the product would overcome basic developmental problems with the product. More broadly, while these flaws very likely indicate that Mr. Fox’s conclusions are incorrect, that is not an issue for the court to decide. Rather, what troubles the court is that Mr. Fox does not even grapple with the basic facts of the case, instead opting to make an ultimate conclusion without adequately explaining how he reached that conclusion. *Navarro v. Fuji Heavy Indus.*, 117 F.3d 1027, 1031 (7th Cir. 1997) (“[A] conclusion without any support is not one based on expert knowledge and entitled to the dignity of evidence.”).

⁴³ The court does not intend this discussion to be an exclusive list of the flaws with the methodology of Mr. Fox’s opinion.

category ominously entitled “other adjustment.”⁴⁴ (Docket #214-2 Ex. H). As Professor Robert Lloyd noted, the “choice of a discount rate is not a purely mechanical calculation,” but rather is a decision that “requires a number of subjective judgments.” Robert M. Lloyd, *Discounting Lost Profits in Business Litigation: What Every Lawyer and Judge Needs to Know*, 9 TRANSACTIONS 9, 63 (2007). Here, Mr. Fox has provided the court with a discount rate, but the court has no means to test whether the discount rate that was chosen appropriately reflects the relative riskiness of the cash flows involved. Instead, the witness provides broad platitudes about how the discount rate he chose was “appropriate.” (Docket #214-2 at 28). Indeed, the court has extreme reservations about whether Mr. Fox is even qualified to testify as to the relative risk involved with the investment in question, given that Mr. Fox does not hold himself out to be any sort of expert on the swimming pool pump motor market. Moreover, the court notes that the data underlying Mr. Fox’s discount rate is a direct product of the same questionable data that forms the basis of Dr. Keegan’s projections regarding future sales.⁴⁵ *Id.* at 28-29. More to the point, the witness has provided the court with a bottom line number for the discount rate and hopes that the court will accept the assessment because of the witness’s

⁴⁴ Mr. Fox explains the 5.5% increment is used to reflect the “specific risk associated with the launch and acceptance of the eMod/Guardian functionality.” (Docket #214-2 at 28).

⁴⁵ Moreover, Mr. Fox never states his risk analysis regards the likelihood of whether Dr. Keegan’s numbers are correct.

alleged expert status.⁴⁶ The Seventh Circuit has made clear that when an expert offers the court only a “bottom line,” and no means by which to adjudge its validity as an opinion in contrast to a differing opinion, the expert has offered “nothing of value to the judicial process.”⁴⁷ *McMahon v. Bunn-O-Matic Corp.*, 150 F.3d 651 at 658 (7th Cir. 1998). (“No [expert] would put such an unsupported assertion in a scholarly article... Why then should courts pay it any heed?”).⁴⁸

Having discussed the reliability prongs, the court proceeds to the remaining contested prong of the *Daubert* inquiry. While an unreliable method alone is reason enough to exclude expert testimony, the court reviews AOS’s relevancy arguments, as they relate to the over arching issue of what FS can argue for in regard to its claim for damages associated with its unjust enrichment claim.

⁴⁶ To be clear, the issue is not whether Mr. Fox ever explained his assessment of the discount rate. The problem for the court is that Mr. Fox has never explained why he assigned the specific discount rate he did to this case as opposed to any other number. *United States v. Mamah*, 332 F.3d 475, 478 (7th Cir. 2003) (“It is critical under Rule 702 that there be a link between the facts or data the expert has worked with and the conclusion the expert’s testimony is intended to support.”) It seems, in the final analysis, the 5.5% number is wholly arbitrary.

⁴⁷ The plaintiff, in its previous brief to the court on this issue, cited to *Tuf Racing Products.*, 223 F.3d at 591, for the proposition that forecasting future sales and deriving damages for those sales is sound science. FS’s discussion of *Tuf Racing Products* misses the point. The issue in this case is not whether an accountant is qualified to discount future earning, as it was in *Tuf Racing Products*. *Id.* at 585. The issue is rather whether the method employed by the experts in this case are reliable and based on sound data and assumptions.

⁴⁸ Presumably, the discount rate should incorporate the risk of the investment. Specifically, in this case, the discount rate should note the probability that Dr. Keegan’s predictions were wrong. However, Mr. Fox readily admits that he does not know the error rate for his calculations (Fox Dep. at 105), confirming the court’s conclusions regarding the reliability of the methods used by Mr. Fox. See *Daubert*, 509 U.S. at 594 (holding that the court “should consider the known or potential rate of error” when evaluating an expert’s opinion).

5. The Relevancy of the Expert Testimony

AOS argues that FS's attempts through its two experts to argue for an award of damages is unwarranted under the law of unjust enrichment, rendering the testimony of the two experts irrelevant. The defendant's argument is really premised on two separate contentions: (1) a cause of action under the quasi-contractual theory of unjust enrichment does not allow an award of future damages; and (2) an award of future profits must be reasonably certain, a standard absent from the expert's conclusions. (Def.'s Br. 12-16). Keeping these two arguments in mind, the court briefly examines the legal standards for awarding damages under a cause of action for unjust enrichment, with the intention of clarifying an issue of contention.⁴⁹

In Wisconsin, a cause of action for unjust enrichment is "grounded on the moral principle that one who has received a benefit has a duty to make restitution where retaining such a benefit would be unjust." *Watts v. Watts*, 137 Wis. 2d 506, 531, 405 N.W.2d 303 (1987). To prevail on an unjust enrichment claim, a plaintiff must prove that: (1) a benefit was "conferred upon the defendant by the plaintiff"; (2) there was an "appreciation by the defendant of the fact of such benefit"; and (3) "acceptance and retention" of the benefit by defendant, under circumstances such that it would be "inequitable to retain the benefit without payment of the value

⁴⁹ The court enters this thicket of law keeping in mind the recent warning provided by the Seventh Circuit in *Lindquist Ford, Inc. v. Middleton Motors, Inc.*: "Wisconsin case law in this area can be confusing; the nomenclature and elements of proof are sometimes mixed up, leading to misconception about the nature and requirements of these discrete causes of action." 557 F.3d 469, 476 (7th Cir. 2009).

thereof.” *Seegers v. Sprague*, 70 Wis. 2d 997, 1004, 236 N.W.2d 227 (1975). As the plaintiff notes in its latest brief to the court, “under Wisconsin law, unjust enrichment is a quasi-contractual claim residing within the ‘domain of contract law.’” (Pl.’s 12/15/10 Br. at 4) (citing *Lindquist Ford, Inc.*, 557 F.3d at 476). A “quasi contract means there is no contract in fact [but] the parties will be treated under the circumstances as if there had been a contract.” *Arjay Inv. Co. v. Kohlmetz*, 9 Wis. 2d 535, 539, 101 N.W.2d 700 (1960). However, recovery under a theory of quasi-contract is different than that for a breach of contract, in that the objective of recovery under a theory of quasi-contract is not to protect “an injured party’s expectation or reliance interests,” such as restoring the benefit of a bargain. *Atacs Corp. v. Trans World Communs.*, 155 F.3d 659, 669 (3d Cir. 1998). Rather, the goal of an action founded in quasi-contract is to “restore the aggrieved party to his [or her] former position by return of the goods or services delivered, or its equivalent in money.” *Id.*; see also 1-1 Corbin on Contracts § 1.20 (“The recovery is designed to restore the status quo ante”); Woodward on the Law of Quasi Contracts, § 268 (1913) (“The theory of the remedy being that the parties should be placed substantially in status quo, the measure of recovery is the value of the plaintiff’s performance.”). Accordingly, the “rationale of the cases allowing recovery for money *had and received* on the theory of quasi contract” is that it is the “duty” of a person who received the benefit of another’s property to “*return* the property or its value.” *Arjay Inv. Co.*, 9 Wis. 2d at 539-40 (emphasis added). As such, as the court noted in its summary judgment order, the “measure of the damages under an unjust

enrichment claim is limited to the value of the ‘benefit conferred upon the defendant.’”⁵⁰ (Docket #195 at 67 n.77) (quoting *Mgmt. Computer Servs., Inc. v. Hawkins*, 206 Wis. 2d 158, 188, 557 N.W.2d 67 (1996)).

The plaintiff argues that the “benefit [FS] conferred onto [AOS] in this case is the technical information, instruction, and assistance [AOS] received.” (Pl.’s Resp. Br. at 6). If FS was only seeking damages for the value of the plaintiff’s “technical information, instruction, and assistance” to AOS at the time the property and services were provided, this matter would never have been litigated in the manner and to the extent that it has to date. Rather, FS first argues that AOS is required to pay for not only the value of the plaintiff’s “technical information, instruction, and assistance,” but, assuming that FS can prove AOS employed FS’s know-how in the making of the Guardian, also a portion of the value of the product AOS eventually created initially utilizing the plaintiff’s property and services. Moreover, FS takes the argument even a step further, contending that FS is entitled to a portion of projected profits AOS will potentially receive from the Guardian in the future, discounted to the present values.

To even restate the plaintiff’s argument is to manifest the argument’s absurdity. FS grossly overestimates what it can recover under its remaining unjust

⁵⁰ The court notes that damages for the quasi-contractual claim of unjust enrichment differ for damages under another central quasi-contractual theory of relief in Wisconsin, quantum meruit. Whereas the “measure of damages under unjust enrichment is limited to the value of the benefit conferred on the defendant” and “any cost the plaintiff may have incurred are generally irrelevant,” there is a “more liberal recovery rule” for quantum meruit claims, where damages are “measured by the reasonable value of the plaintiff’s services.” *Lindquist Ford, Inc.*, 557 F.3d at 477-78.

enrichment claim. The theory on which FS's remaining claim rests is a means by which an aggrieved plaintiff can recover money or services or property "had and received," such that the defendant "return[s] the property or its value," forming the basis of recovery. *Arjay Inv. Co.*, 9 Wis. 2d at 539. Here, the plaintiff, without citing to any authority, argues that the value of the "tips" FS gave to AOS on how to build an SVRS pool pump motor can be determined through taking a percentage of present value of the expected future earnings of the current version of the pool pump motor.⁵¹ This assertion would only make sense if FS was asking the court to restore the benefit of some sort of bargain related to a breach of a contract in a joint venture relationship where a specific royalty amount was envisioned. However, the damages for an unjust enrichment claim do not extend so far. See, e.g., *Morton v. Roanoke City Mills, Inc.*, 15 F.2d 545, 547 (4th Cir. 1926) ("The benefit to the defendant was the proper test . . . it was incumbent upon the plaintiff to prove the value of his services (not the consequential or indirect benefit to the defendant flowing from the advertisement of its business)"); see also *Mem'l Drive Consultants, Inc. v. ONY, Inc.*, 29 Fed. Appx. 56, 61 (2d Cir. 2002) (summary order) (issued in part by Sotomayor, J.) (holding that to "speculatively . . . reconstruct post-commercialization royalties as a means of awarding [the plaintiff] 'the benefit of the bargain' . . . would have improperly sought to establish [the plaintiff's] expectation

⁵¹ The experts' testimony only goes so far as to say that the future sales of the Guardian can be valued using a discounting analysis common to those assessing the value of a company for an initial public offering. (Docket #214-4 at 44). Nothing in the proffered testimony provides any reasoned explanation for why the goods and services provided by FS can be valued in a similar manner.

interest under . . . not the restitution interest”) (quoting *Collins Tuttle & Co., Inc. v. Leucadia, Inc.*, 153 A.D.2d 526, 527, 544 N.Y.S.2d 604 (1st Dep’t 1989) (“Recovery on a claim premised upon quasi-contract or unjust enrichment is limited to the reasonable value of the services rendered by the plaintiff. . . . [Because] there was no exclusive sales agency agreement between the parties, measurement of plaintiff’s recovery on the basis of one half of the brokerage commission actually paid . . . is entirely inappropriate. Plaintiff is limited to recovery of the value of the brochure or setup which it prepared.”)). The reason for the limit on damages is a product of the court’s earlier discussion: the purpose of an unjust enrichment is to restore the aggrieved party to its former position by return of the goods and services provided or the money equivalent of those goods and services. See Woodward on the Law of Quasi Contracts, § 292 (“It is fundamental that the plaintiff’s recovery must be limited to the value of the benefit unjustly enjoyed by the defendant at the plaintiff’s expense . . . since the obligation is to make restitution, *not to account, profits*, as such are *not* recoverable”) (emphasis added) (explaining *Western Assurance Co. v. Towle*, 65 Wis. 247, 26 N.W. 104 (1885)). To provide otherwise would not restore the status quo to FS, but would rather give FS a tremendous windfall far beyond the value of its know-how.

FS’s underlying premise in arguing that it deserves damages similar to those in a breach of contract action is that the plaintiff somehow had a joint venture relationship with AOS. (Pl.’s Resp. Br. at 6) (“Broadly stated, the benefit [FS] conferred on [AOS] in this case is the technical information, instruction, and

assistance [AOS] received during their *joint business relationship*") (emphasis added). Choice of language aside, it is quite apparent that, by advancing an already failed premise, FS fails to recognize the full import of this court's earlier ruling on summary judgment, a plain reading of which makes it abundantly clear that FS did not enjoy a joint venture relationship with AOS entitling FS to share in AOS's future royalties for the Guardian. (Docket #172 at 56) ("Here, there is no evidence that a joint venture relationship existed between the parties."). If FS did have such an agreement with AOS, the plaintiff could legitimately try to seek damages related to restoring the benefit of that bargain. However, FS is left with an unjust enrichment claim, and damages for unjust enrichment claims are simply not a substitute for breach of contract damages.⁵² *Harris Corp. v. Giesting & Assocs.*, 297 F.3d 1270, 1276 (11th Cir. 2002) (rejecting that a plaintiff asserting an unjust enrichment claim should "recover benefit of the bargain damages" and instead holding that the plaintiff was entitled to the "reasonable value of the labor performed and the market value of any furnished materials"); see also *Froom-Lipman Group, L.L.C. v. Forest City Enters.*, No. 06-CV-185, 2010 U.S. Dist. LEXIS 101521, at *26-27 (N.D. Ohio Sept. 27, 2010) ("[C]ourts have made clear that damages under unjust enrichment are not a substitute for breach of contract damages") (citing, in part, to *Shulse v. City of Mayville*, 223 Wis. 624, 271 N.W. 643, 647 (1937)). In fact, two courts have recently concurred with this court's view that awarding a share of hypothetical future profits

⁵² For these reasons and the reasons that follow, a "reasonable royalty" rate is completely inappropriate with regard to the damages analysis in this matter.

as a damages award for unjust enrichment is inappropriate. See *Froom-Lipman Group, L.L.C.*, 2010 U.S. Dist. LEXIS 101521, at *28-30 (holding that “the appropriate measure of damages [for an unjust enrichment claim is] the value of the services provided by plaintiff . . . not the potential future profits”) (citing *Media Servs. Group v. Bay Cities Communs., Inc.*, 237 F.3d 1326, 1330-31 (11th Cir. 2001)); see also *Allied Erecting & Dismantling Co. v. Genesis Equip. & Mfg., Inc.*, No. 06-CV-114, 2010 U.S. Dist. LEXIS 127864 (N.D. Ohio Nov. 19, 2010) (“Plaintiffs do not cite, and the Court is not aware of, any trade secret or patent case in which a defendant’s projected profits have been used as a measure of unjust enrichment damages.”) The court concurs with the views of those two courts finding that awarding a share of hypothetical future profits is an invalid way to value the benefit received by a defendant in an unjust enrichment action.⁵³

An analogy perhaps best illustrates the court’s conclusion. Last summer, a story hit the national news where a seventeen year old boy, through a series of

⁵³ The plaintiff cites to the case of *Russo v. Ballard Medical Prods.*, 550 F.3d 1004 (10th Cir. 2008) to support its argument. The case does not deal with an independent unjust enrichment claim, and the court was not presented with the issue of whether the plaintiff’s trade secrets could be valued using the future potential earnings. Moreover, that case is a product of its procedural posture, an appeal of a jury award. *Id.* at 1018. Given evidence that the plaintiff’s trade secrets entitled him to the *entire* value of the present value of the defendant’s product, the court could not conclude that there was “no evidence to support” the jury’s verdict. *Id.* at 1019. The plaintiff also cites to the case of *Bersch & Co. v. Dairyland Greyhound Park*, 185 Wis. 2d 916, 1994 Wisc. App. LEXIS 623, at *36 (Wis. Ct. App. 1994), for the principle that unjust enrichment damages that are the result of past services rendered can be valued by looking at the future value to the defendant. *Bersch* does not conflict with this court’s present decision. The *Bersch* court held that past services have value because of their future potential, and the court refused to dismiss the unjust enrichment claim at the pleading stage because it was possible for the plaintiff to show that his past services did have a value. *Id.* Here, there is no support that the way one should value the services *in this case* is by taking a percentage of the future value of the sale of a good to which the plaintiff may have partially contributed.

fourteen “swaps” using the Craigslist website, traded an old cell phone for a 2000 Porsche Boxster S. See *Local Teen Uses Craigslist to Trade Cell Phone for Porsche*, THE HUFFINGTON POST, July 21, 2010, Available at: http://www.huffingtonpost.com/2010/07/2/steven-ortiz-local-teen-t_n_654246.html (last viewed December 21, 2010). Had the teenager acquired the cell phone such that it was “inequitable” to retain the phone without payment of the value in the first place, it would be patently absurd for the original owner of the cell phone to sue the teen under a theory of unjust enrichment demanding the value of the Porsche. The value of the benefit the teen received in that case is not a product of what the old cell phone *actually* yielded – it is a product of the value of the benefit the defendant received when he acquired the cell phone. Likewise, FS provides no reason to conclude that the value of the information the plaintiff provided the defendant is a product of what that information actually yielded or potentially could yield.⁵⁴

The court notes, however, that the above analogy is even a step removed from the current case, in that, in the analogy, any finder of fact would be *certain* of the fact that the cell phone yielded the Porsche, whereas, in this case, the finder of fact cannot be reasonably certain that AOS will receive any future earnings. Central to the court’s discussion is that damages for unjust enrichment claims “must be

⁵⁴ Of course, with the court’s analogy, FS’s argument could be used to say that the defendant is entitled to the whole Porsche, given that the value of the benefit the teen received was 100% due to what the hypothetical plaintiff contributed. Moreover, in addition to clarifying the court’s conclusion, the analogy serves as a means of explaining the legal limits of FS’s specific unjust enrichment claim, a function of the court in a dispute over a quasi-contract. See *Lindquist Ford, Inc.*, 557 F.3d at 469 (holding, that under Wisconsin law, the third element of unjust enrichment “appears to require an equitable determination by the court.”)

proven with reasonable certainty such that the trial court [can] make a fair and reasonable approximation.” *Halverson v. River Falls Youth Hockey Ass’n*, 226 Wis. 2d 105, 116, 593 N.W.2d 895 (Ct. App. 1999). To establish the amount of damages with enough certainty to justify allowing the damages to go to the jury, a plaintiff need only show that a “reasonable jury could award the [plaintiff] damages in an amount that is supported by the evidence.” *AccuWeb, Inc. v. Foley & Lardner*, 2008 WI 24, ¶ 24, 308 Wis. 2d 258; 746 N.W.2d 447 (2008). Ultimately, the term “reasonable certainty serves as a screening device,” allowing the courts to intervene only when “proffered evidence is clearly insufficient to support a claim of lost profits.” Russell M. Ware, *THE LAW OF DAMAGES IN WISCONSIN* § 26.9 (5th ed. 2010). While “reasonable doubts as to remedy ought to be resolved against the wrongdoer,” damages “must be proved, and not just dreamed.” *Mindgames, Inc. v. W. Publ’g Co.*, 218 F.3d 652, 658 (7th Cir. 2000) (emphasis added). As the court commented in the July 9, 2010 hearing, the damages numbers provided by Dr. Keegan and Mr. Fox seem “pie in the sky” (Docket #194) (Tr. at 28), and the court’s analysis here has only confirmed the court’s initial thoughts. For the reasons stated throughout this order, the evidence provided to the court for this present motion confirm that no reasonable juror could award the plaintiff damages in the amount theorized by FS’s witnesses, as such evidence is based on a series of wholly unrealistic assumptions and the false premise that the value of the plaintiff’s goods and services allegedly used by the defendant can be determined by looking at what that information in part actually and potentially yielded years after the fact. As such, the court finds that

damages estimates are wholly speculative, and, coupled with the court's discussion regarding the usefulness of future earnings potentials for gauging the value of the goods and services allegedly received by AOS, the court finds that the plaintiff's evidence regarding future damages will not assist the finder of fact in this matter.

Finally, the court notes that there remains one more tangential problem with the relevancy of Mr. Fox's testimony: the means by which he attributed the present value of AOS's future profits to FS. The witness attributes five to fifty-five percent of the present value of AOS's future profits to FS based on the testimony from both sides that FS contributed five to fifty percent of the "know-how" that went into AOS's first generation of the SVRS device. Even if the court assumed that the value of FS's "know how" could be measured vis-a-vis an estimate of AOS's future sales of the Guardian, the court cannot say that Mr. Fox's assessment of that value is relevant. The future profits that could be derived by AOS do not stem from sales of AOS's first generation of SVRS device. Rather, future profits would derive from the latest Guardian model, for which Mr. Fox does not provide his own estimate or any other estimate for how much FS contributed. Moreover, Mr. Fox makes the assumption that the amount FS contributed to the SVRS device should be its share of the present value of the future profits. This makes little sense when several of the so-called demand drivers, such as the need for an "energy efficient" motor (Docket #214-4 at 17), are not due to FS's contributions. Accordingly, even if Mr. Fox were allowed to testify with regard to his opinions about the present value of AOS's future expected profits from the Guardian, the witness most certainly would not be able to

opine with regard to how much of the present value of the future expected profit rightfully belongs to FS. The court next turns to the last issue raised by AOS: assuming the proffered testimony would somehow assist the jury, whether the prejudicial effects of hearing the evidence far outweighs the probative value of the evidence.

6. The Rule 403 Inquiry

While the court need not reach the issue, as the court has already found that the evidence proffered by the plaintiff will not assist the trier of fact, the court finds that, even if somehow the basic assumption of FS's witnesses was true,⁵⁵ the evidence's probative value is substantially outweighed by the danger of unfair prejudice and the risk of misleading the jury. Fed. R. Evid. 403. Given the fundamental problems with the testimony of Dr. Keegan and Mr. Fox, and the obvious danger of putting unrealistic damage figures before the jury, the introduction of such evidence could easily confuse the jury and result in a decision that is contrary to applicable law. See *Kurncz v. Honda North Am.*, 166 F.R.D. 386, 390-391 (W.D. Mich. 1996) ("The methodology debate may simply confuse the issues . . . there is also the opposite danger that the serious debate on the merits of the method will not confuse the jurors but will pass over their heads entirely, and they will simply accept the number because it has the sanction of an expert."). In short, the defendant's first motion *in limine* will be granted in full, and the plaintiff is

⁵⁵ That assumption being that the value of the benefit the plaintiff provided to the defendants can be the product of potential future earnings of a product that was derived in-part from the plaintiff's "know-how."

limited in proving damages as to the reasonable value of the services FS performed for AOS at the time they were performed and the market value of any furnished materials.

III. REMAINING ISSUES

Given the court's resolution of AOS's first motion *in limine*, the defendant's second motion *in limine* will be denied as moot, as it is a motion to exclude parts of the testimony of Mr. Fox and Dr. Keegan. (Docket #216). Moreover, the court notes that there are several motions to seal documents on the docket. (Docket #205; Docket #215; Docket #225). The court has an independent duty to scrutinize motions to seal. *Citizens First Nat'l Bank v. Cincinnati Ins. Co.*, 178 F.3d 943, 945 (7th Cir. 1999). With the benefit of the parties' briefs on the matter, and having reviewed the various documents that have been requested to be sealed, the court concludes that the information contained therein is sensitive business information that would be improper and harmful to be disclosed in the public record. *Id.* at 946. As such, the court will grant all three motions to seal.

The court anticipates the parties will submit the final pretrial report on January 6, 2011, in accordance with the specific instructions provided in the court's November 24, 2010 order. (Docket #204). In the meantime, before spilling any more ink in this litigation, the court finds it appropriate to once again remind counsel for the parties that the interests of their respective clients, indeed, the cause of justice, would be better served in accepting the court's invitation addressed in the order on summary judgment "to candidly discuss with each other the course that lies

ahead in this case . . . [s]uch discussions should focus on whether it is in anyone's best interest to continue to protract this litigation any further." (Docket #195 at 69).

Accordingly,

IT IS ORDERED that the defendant's motion for "leave to file under seal its memorandum in support of its motion *in limine* to exclude Fail-Safe's claim for future damages and exhibits to supporting declaration" (Docket #205) be and the same is hereby **GRANTED**;

IT IS FURTHER ORDERED that defendant's motion *in limine* to exclude Fail-Safe's claim for future damages (Docket #207) be and the same is hereby **GRANTED**. Plaintiff Fail-Safe, L.L.C., be and the same is hereby precluded from presenting any testimony, opinions, or argument that references or relies on future sales of the Guardian, and the testimony of Dr. Keegan and Mr. Fox be and the same is hereby excluded;

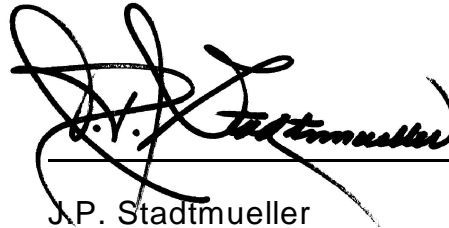
IT IS FURTHER ORDERED that defendant's motion for "leave to file under seal its memorandum in support of its motion *in limine* to exclude Dr. Keegan's and Mr. Fox's new theories and exhibits to supporting declaration" (Docket #215) be and the same is hereby **GRANTED**;

IT IS FURTHER ORDERED that defendant's motion to "exclude Dr. Keegan's and Mr. Fox's new theories" (Docket #216) be and the same is hereby **DENIED** as moot; and

IT IS FURTHER ORDERED that plaintiff's motion to "file response to defendant A.O. Smith Corporation's motion *in limine* to exclude Dr. Keegan's and Mr. Fox's new theories and supporting declarations under seal" (Docket #225) be and the same is hereby **GRANTED**.

Dated at Milwaukee, Wisconsin, this 23rd day of December, 2010.

BY THE COURT:

A handwritten signature in black ink, appearing to read "J.P. Stadtmueller", is written over a horizontal line.

J.P. Stadtmueller
U.S. District Judge